

NORMAL PROCEDURES

TABLE OF CONTENTS

	Page
Introduction	4-3
Airspeeds For Normal Operation	4-3
NORMAL PROCEDURES	4-4
Preflight Inspection	4-4
Cabin	4-5
Empennage	4-6
Right Wing Trailing Edge	4-6
Right Wing	4-7
Nose	4-8
Left Wing Leading Edge	4-9
Left Wing	4-10
Left Wing Trailing Edge	4-10
Before Starting Engine	4-11
Starting Engine (With Battery)	4-12
Starting Engine (With External Power)	4-13
Before Takeoff	4-15
Takeoff	4-18
Normal Takeoff	4-18
Short Field Takeoff	4-18
Enroute Climb	4-19
Normal Climb	4-19
Maximum Performance Climb	4-19
Cruise	4-19
Descent	4-20
Before Landing	4-21
Landing	4-21
Normal Landing	4-21
Short Field Landing	4-21
Balked Landing	4-22
After Landing	4-22
Securing Airplane	4-22

(Continued Next Page)

TABLE OF CONTENTS (Continued)

	Page
AMPLIFIED NORMAL PROCEDURES	4-23
Preflight Inspection	4-23
Starting Engine	4-25
Recommended Starter Duty Cycle	4-26
Leaning For Ground Operations	4-26
Taxiing	4-27
Before Takeoff	4-29
Warm Up	4-29
Magnetos Check	4-29
Alternator Check	4-29
Elevator Trim	4-30
Landing Lights	4-30
Takeoff	4-30
Power Check	4-30
Wing Flap Settings	4-31
Crosswind Takeoff	4-31
Enroute Climb	4-32
Cruise	4-33
Leaning Using Exhaust Gas Temperature (EGT)	4-35
Fuel Savings Procedures For Normal Operations	4-38
Fuel Vapor Procedures	4-39
Stalls	4-40
Landing	4-41
Normal Landing	4-41
Short Field Landing	4-41
Crosswind Landing	4-42
Balked Landing	4-42
Cold Weather Operations	4-43
Starting	4-44
Winterization Kit	4-45
Hot Weather Operations	4-46
Noise Characteristics	4-46

Section 4 provides procedures and amplified instructions for normal operations using standard equipment. Normal procedures associated with optional systems can be found in Section 9, Supplements.

Unless otherwise noted, the following speeds are based on a maximum weight of 3100 pounds and may be used for any lesser weight.

Normal Climb	70 - 80 KIAS
Short Field Takeoff, Flaps 20°, Speed at 50 Feet	58 KIAS

Normal, Sea Level.	85 - 95 KIAS
Best Rate of Climb, Sea Level	80 KIAS
Best Rate of Climb, 10,000 Feet	74 KIAS
Best Angle of Climb, Sea Level.	65 KIAS
Best Angle of Climb, 10,000 Feet	68 KIAS

Normal Approach, Flaps UP	70 - 80 KIAS
Normal Approach, Flaps FULL	60 - 70 KIAS
Short Field Approach, Flaps FULL	60 KIAS

Maximum Power, Flaps 20° 55 KIAS

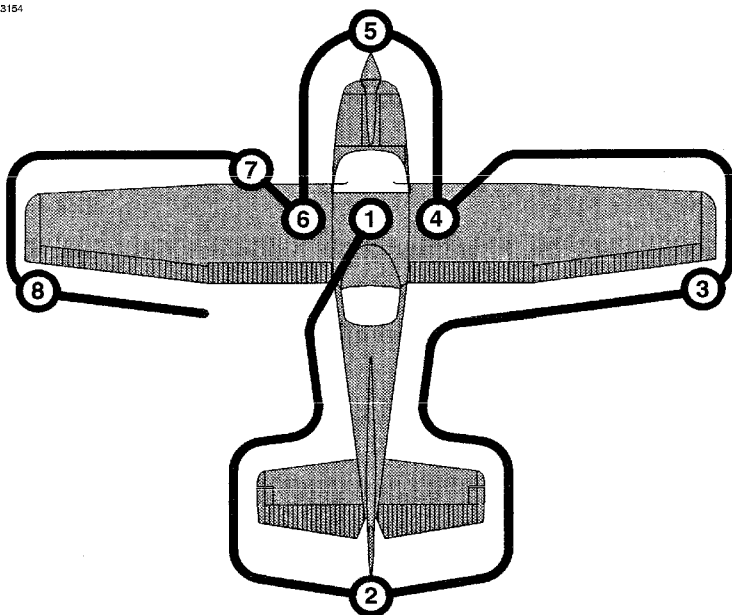
3100 POUNDS	110 KIAS
2600 POUNDS	101 KIAS
2100 POUNDS	91 KIAS

Takeoff or Landing.....15 KNOTS

NORMAL PROCEDURES

PREFLIGHT INSPECTION

B3154



NOTE

Visually check airplane for general condition during walk-around inspection. Airplane should be parked in a normal ground attitude (refer to Figure 1-1) to make sure that fuel drain valves allow for accurate sampling. Use of the refueling steps and assist handles will simplify access to the upper wing surfaces for visual checks and refueling operations. In cold weather, remove even small accumulations of frost, ice or snow from wing, tail and control surfaces. Also, make sure that control surfaces contain no internal accumulations of ice or debris. Prior to flight, check that pitot heater is warm to touch within 30 seconds with battery and pitot heat switches on. If a night flight is planned, check operation of all lights, and make sure a flashlight is available.

Figure 4-1

PREFLIGHT INSPECTION (Continued)

① CABIN

1. Pitot Tube Cover - REMOVE (check for pitot blockage)
2. Pilot's Operating Handbook - ACCESSIBLE TO PILOT
3. Garmin G1000 Cockpit Reference Guide - ACCESSIBLE TO PILOT
4. Airplane Weight and Balance - CHECKED
5. Parking Brake - SET
6. Control Wheel Lock - REMOVE

Fluids:

Sump Drains - 13

Dip Tanks

Oil Dip

"Balanced Field Length"

take off to 50' +

land from 50'

ORM

WARNING

WHEN THE MASTER SWITCH IS ON, USING AN EXTERNAL POWER SOURCE, OR MANUALLY ROTATING THE PROPELLER, TREAT THE PROPELLER AS IF THE MAGNETOS SWITCH WERE ON. DO NOT STAND, NOR ALLOW ANYONE ELSE TO STAND, WITHIN THE ARC OF THE PROPELLER SINCE A LOOSE OR BROKEN WIRE, OR A COMPONENT MALFUNCTION, COULD CAUSE THE ENGINE TO START.

7. MAGNETOS Switch - OFF
8. AVIONICS Switch (BUS 1 and BUS 2) - OFF
9. MASTER Switch (ALT and BAT) - ON
10. Primary Flight Display (PFD) - CHECK (verify PFD is ON)
11. FUEL QTY (L and R) - CHECK
12. LOW FUEL L and LOW FUEL R Annunciators - CHECK (verify annunciators are not shown on PFD)
13. OIL PRESSURE Annunciator - CHECK (verify annunciator is shown)
14. LOW VACUUM Annunciator - CHECK (verify annunciator is shown)
15. AVIONICS Switch (BUS 1) - ON
16. Forward Avionics Fan - CHECK (verify fan is heard)

**Hobbs/Tach
Engine/System/Gal Rem
Lights
(Nav/Rot/Strobe/Pulse)**

PREFLIGHT INSPECTION (Continued)

① CABIN (Continued)

17. AVIONICS Switch (BUS 1) - OFF
18. AVIONICS Switch (BUS 2) - ON
19. Aft Avionics Fan - CHECK (verify fan is heard)
20. AVIONICS Switch (BUS 2) - OFF
21. PITOT HEAT Switch - ON (carefully check that pitot tube is warm to the touch within 30 seconds)
22. PITOT HEAT Switch - OFF
23. Stall Warning System - CHECK (gently move the stall vane upward and verify that the stall warning horn is heard)
24. LOW VOLTS Annunciator - CHECK (verify annunciator is shown)
25. MASTER Switch (ALT and BAT) - OFF
26. Elevator and Rudder Trim Controls - TAKEOFF position
27. FUEL SELECTOR Valve - BOTH
28. ALT STATIC AIR Valve - OFF (push full in)
29. Fire Extinguisher - CHECK (verify gage pointer in green arc)

② EMPENNAGE

1. Baggage Compartment Door - CHECK (lock with key)
2. Rudder Gust Lock (if installed) - REMOVE
3. Tail Tiedown - DISCONNECT
4. Control Surfaces - CHECK (freedom of movement and security)
5. Trim Tabs - CHECK (security)
6. Antennas - CHECK (security of attachment and general condition)

③ RIGHT WING Trailing Edge

1. Flap - CHECK (security and condition)
2. Aileron - CHECK (freedom of movement and security)

(Continued Next Page)

PREFLIGHT INSPECTION (Continued)

④ RIGHT WING

1. Wing Tiedown - DISCONNECT
2. Fuel Tank Vent Opening - CHECK (verify opening is clear)
3. Main Wheel Tire - CHECK (proper inflation and general condition (weather checks, tread depth and wear, etc.))
4. Fuel Tank Sump Quick Drain Valves - DRAIN

Drain at least a cupful of fuel (using sampler cup) from each sump location to check for water, sediment, and proper fuel grade before each flight and after each refueling. If water is observed, take further samples until clear and then gently rock wings and lower tail to the ground to move any additional contaminants to the sampling points. Take repeated samples from **all** fuel drain points until **all** contamination has been removed. If contaminants are still present, refer to WARNING below and do not fly airplane.

NOTE

Collect all sampled fuel in a safe container. Dispose of the sampled fuel so that it does not cause a nuisance, hazard or damage to the environment.

WARNING

IF, AFTER REPEATED SAMPLING, EVIDENCE OF CONTAMINATION STILL EXISTS, THE AIRPLANE SHOULD NOT BE FLOWN. TANKS SHOULD BE DRAINED AND SYSTEM PURGED BY QUALIFIED MAINTENANCE PERSONNEL. ALL EVIDENCE OF CONTAMINATION MUST BE REMOVED BEFORE FURTHER FLIGHT.

5. Fuel Quantity - CHECK VISUALLY (for desired level)
6. Fuel Filler Cap - SECURE and VENT CLEAR

(Continued Next Page)

PREFLIGHT INSPECTION (Continued)

⑤ NOSE

1. Static Source Opening (right side of fuselage) - CHECK (verify opening is clear)
2. Fuel Strainer Quick Drain Valve (located on lower right side of engine cowling) - DRAIN

Drain at least a cupful of fuel (using sampler cup) from valve to check for water, sediment, and proper fuel grade before each flight and after each refueling. If water is observed, take further samples until clear and then gently rock wings and lower tail to the ground to move any additional contaminants to the sampling points. Take repeated samples from **all** fuel drain points, including the fuel return line and fuel selector, until **all** contamination has been removed. If contaminants are still present, refer to WARNING below and do not fly the airplane.

NOTE

Collect all sampled fuel in a safe container. Dispose of the sampled fuel so that it does not cause a nuisance, hazard, or damage to the environment.

WARNING

IF, AFTER REPEATED SAMPLING, EVIDENCE OF CONTAMINATION STILL EXISTS, THE AIRPLANE SHOULD NOT BE FLOWN. TANKS SHOULD BE DRAINED AND SYSTEM PURGED BY QUALIFIED MAINTENANCE PERSONNEL. ALL EVIDENCE OF CONTAMINATION MUST BE REMOVED BEFORE FURTHER FLIGHT.

3. Engine Cooling Air Inlets - CHECK (clear of obstructions)

(Continued Next Page)

PREFLIGHT INSPECTION (Continued)

⑤ NOSE (Continued)

- 4. Propeller and Spinner - CHECK (for nicks, security and no red oil leaks)

NOTE

Minor leaking of the blade seal area is possible on new propellers as the seals wear in. Any initial leakage will be visible as minor streaking on the blade or blades. Clean off oil residue and cycle propeller at least 5 times. Oil leakage should be reduced or completely stopped. If minor leaking continues after 20 hours of operation or increases remove propeller and have repaired.

- 5. Air Filter - CHECK (for restrictions by dust or other foreign matter)
- 6. Nosewheel Strut and Tire - CHECK (proper inflation of strut and general condition of tire (weather checks, tread depth and wear, etc.))
- 7. Engine Oil Dipstick/Filler Cap:
 - a. Oil level - CHECK
 - b. Dipstick/filler cap - SECURE

NOTE

Do not operate with less than 4 quarts. Fill to 9 quarts for extended flight.

- 8. Static Source Opening (left side of fuselage) - CHECK (verify opening is clear)

⑥ LEFT WING Leading Edge

- 1. Fuel Tank Vent Opening - CHECK (blockage)
- 2. Stall Warning Vane - CHECK (freedom of movement)
- 3. Landing/Taxi Light(s) - CHECK (condition and cleanliness of cover)

(Continued Next Page)

PREFLIGHT INSPECTION (Continued)

⑦ LEFT WING

1. Wing Tiedown - DISCONNECT
2. Fuel Quantity - CHECK VISUALLY (for desired level)
3. Fuel Filler Cap - SECURE and VENT CLEAR
4. Fuel Tank Sump Quick Drain Valves - DRAIN

Drain at least a cupful of fuel (using sampler cup) from each sump location to check for water, sediment, and proper fuel grade before each flight and after each refueling. If water is observed, take further samples until clear and then gently rock wings and lower tail to the ground to move any additional contaminants to the sampling points. Take repeated samples from **all** fuel drain points until **all** contamination has been removed. If contaminants are still present, refer to WARNING below and do not fly airplane.

NOTE

Collect all sampled fuel in a safe container. Dispose of the sampled fuel so that it does not cause a nuisance, hazard, or damage to the environment.

WARNING

IF, AFTER REPEATED SAMPLING, EVIDENCE OF CONTAMINATION STILL EXISTS, THE AIRPLANE SHOULD NOT BE FLOWN. TANKS SHOULD BE DRAINED AND SYSTEM PURGED BY QUALIFIED MAINTENANCE PERSONNEL. ALL EVIDENCE OF CONTAMINATION MUST BE REMOVED BEFORE FURTHER FLIGHT.

5. Main Wheel Tire - CHECK (proper inflation and general condition (weather checks, tread depth and wear, etc.))

⑧ LEFT WING Trailing Edge

1. Aileron - CHECK (freedom of movement and security)
2. Flap - CHECK (security and condition)

BEFORE STARTING ENGINE

**Seat Adjusted/
cranked to pilot's height**

1. Preflight Inspection - COMPLETE
2. Passenger Briefing - COMPLETE
3. Seats and Seat Belts - ADJUST and LOCK (verify inertia reel locking)
4. Brakes - TEST and SET
5. Circuit Breakers - CHECK IN
6. Electrical Equipment - OFF
7. AVIONICS Switch (BUS 1 and BUS 2) - OFF

CAUTION

THE AVIONICS SWITCH (BUS 1 AND BUS 2) MUST BE OFF DURING ENGINE START TO PREVENT POSSIBLE DAMAGE TO AVIONICS.

8. Cowl Flaps - OPEN
9. FUEL SELECTOR Valve - BOTH

Passenger Brief

**seat belts & shoulder harness
personal electronic devices
air vents/heat/comfort
fire extinguisher location/operation
emergency procedures/exits**

Mission Brief

**mission objective
destination, wx, route, alternate, ETE
NOTAMS
crew coordination & CRM
STERILE COCKPIT PROCEDURES
cockpit layout
intercom & radio usage
seats/ seatbelts/ doors
emergency action & equipment**

STARTING ENGINE (With Battery)

1. Throttle Control - OPEN 1/4 INCH
2. Propeller Control - HIGH RPM (push full in)
3. Mixture Control - IDLE CUTOFF (pull full out)
4. STBY BATT Switch:
 - a. TEST - (hold for 10 seconds, verify that green TEST lamp does not go off)
 - b. ARM - (verify that PFD comes on)
5. Engine Indicating System - CHECK PARAMETERS (verify no red X's through ENGINE page indicators)
6. BUS E Volts - CHECK (verify 24 VOLTS minimum shown)
7. M BUS Volts - CHECK (verify 1.5 VOLTS or less shown)
8. BATT S Amps - CHECK (verify discharge shown (negative))
9. STBY BATT Annunciator - CHECK (verify annunciator is shown)
10. Propeller Area - CLEAR (verify that all people and equipment are at a safe distance from the propeller)
11. MASTER Switch (ALT and BAT) - ON
12. BEACON Light Switch - ON

12A Headsets On **NOTE**

If engine is warm, omit priming procedure steps 13 thru 15 below.

13. FUEL PUMP Switch - ON
14. Mixture Control - SET to FULL RICH (full forward) until stable fuel flow is indicated (approximately 3 to 5 seconds), then set to IDLE CUTOFF (full aft) position.
15. FUEL PUMP Switch - OFF
16. MAGNETOS Switch - START (release when engine starts)
17. Mixture Control - ADVANCE SMOOTHLY TO RICH (when engine starts)

NOTE

If the engine is primed too much (flooded), place the mixture control in the IDLE CUTOFF position, open the throttle control 1/2 to full, and engage the starter motor (START). When the engine starts, advance the mixture control to the FULL RICH position and retard the throttle control promptly.

(Continued Next Page)

STARTING ENGINE (With Battery) (Continued)

18. Oil Pressure - CHECK (verify that oil pressure increases into the GREEN BAND range in 30 to 60 seconds)
19. AMPS (M BATT and BATT S) - CHECK (verify charge shown (positive))
20. LOW VOLTS Annunciator - CHECK (verify annunciator is not shown)
21. NAV Light Switch - ON as required
22. AVIONICS Switch (BUS 1 and BUS 2) - ON

23. Lean - 1200 RPM to highest RPM

24. Mission Master - ON

25. GPS - verify database & accept

26. Frequencies - SET

27. ATIS/ASOS - copy

28. Engine/System/Fuel - verify total

29. Field Diagram or Safe Taxi - in view

*New Century Ground
CAPFLIGHT 1497
Taxi from the North T hangars
with the 1 minute Wx
VFR to the SW*

BEFORE TAKEOFF

1. Parking Brake - SET
2. Pilot and Passenger Seat Backs - MOST UPRIGHT POSITION
3. Seats and Seat Belts - CHECK SECURE
4. Cabin Doors - CLOSED and LOCKED
5. Flight Controls - FREE and CORRECT
6. Flight Instruments (PFD) - CHECK (no red X's)
7. Altimeters:
 - a. PFD (BARO) - SET
 - b. Standby Altimeter - SET
8. ALT SEL - SET
9. Standby Flight Instruments - CHECK
10. Fuel Quantity - CHECK (verify level is correct)

NOTE

Flight is not recommended when both fuel quantity indicators are in the yellow band range.

11. Mixture Control - RICH
12. FUEL SELECTOR Valve - SET BOTH
13. Autopilot - ENGAGE (push AP button on either PFD or MFD bezel)
14. Flight Controls - CHECK (verify autopilot can be overpowered in both pitch and roll axes)

(Continued Next Page)

BEFORE TAKEOFF (Continued)

- 15. A/P TRIM DISC Button - PRESS (verify autopilot disengages and aural alert is heard)
- 16. Flight Director - OFF (push FD button on either PFD or MFD bezel)
- 17. Elevator and Rudder Trim Controls - SET FOR TAKEOFF
- 18. Throttle Control - 1800 RPM
 - a. MAGNETOS Switch - CHECK (RPM drop should not exceed 175 RPM on either magneto or 50 RPM differential between magnetos)
 - b. Propeller Control - CYCLE (from high to low RPM; return to high RPM) (push full in)
 - c. VAC Indicator - CHECK
 - d. Engine Indicators - CHECK
 - e. Ammeters and Voltmeters - CHECK
- 19. Annunciators - CHECK (verify no annunciators are shown)
- 20. Throttle Control - CHECK IDLE
- 21. Throttle Control - 1000 RPM or LESS
- 22. Throttle Control Friction Lock - ADJUST
- 23. COM Frequency(s) - SET
- 24. NAV Frequency(s) - SET
- 25. FMS/GPS Flight Plan - AS DESIRED

NOTE

Check GPS availability on AUX-GPS STATUS page. No annunciation is provided for loss of GPS2. **(AUX page 3)**

- 26. XPDR - SET

(Continued Next Page)

BEFORE TAKEOFF (Continued)

27. CDI Softkey - SELECT NAV SOURCE

CAUTION

THE G1000 HSI SHOWS A COURSE DEVIATION INDICATOR FOR THE SELECTED GPS, NAV 1 OR NAV 2 NAVIGATION SOURCE. THE G1000 HSI DOES NOT PROVIDE A WARNING FLAG WHEN A VALID NAVIGATION SIGNAL IS NOT BEING SUPPLIED TO THE INDICATOR. WHEN A VALID NAVIGATION SIGNAL IS NOT BEING SUPPLIED, THE COURSE DEVIATION BAR (D-BAR) PART OF THE INDICATOR IS NOT SHOWN ON THE HSI COMPASS CARD. THE MISSING D-BAR IS CONSIDERED TO BE THE WARNING FLAG.

WARNING

WHEN THE AUTOPILOT IS ENGAGED IN NAV, APR OR BC OPERATING MODES, IF THE HSI NAVIGATION SOURCE IS CHANGED MANUALLY, USING THE CDI SOFTKEY, THE CHANGE WILL INTERRUPT THE NAVIGATION SIGNAL TO THE AUTOPILOT AND WILL CAUSE THE AUTOPILOT TO REVERT TO ROL MODE OPERATION. NO AURAL ALERT WILL BE PROVIDED. IN ROL MODE, THE AUTOPILOT WILL ONLY KEEP THE WINGS LEVEL AND WILL NOT CORRECT THE AIRPLANE HEADING OR COURSE. SET THE HDG BUG TO THE CORRECT HEADING AND SELECT THE CORRECT NAVIGATION SOURCE ON THE HSI, USING THE CDI SOFTKEY, BEFORE ENGAGING THE AUTOPILOT IN ANY OTHER OPERATING MODE.

- 28. CABIN PWR 12V Switch - OFF
- 29. Wing Flaps - UP - 20° (10° preferred)
- 30. Cowl Flaps - OPEN
- 31. Cabin Windows - CLOSED and LOCKED
- 32. STROBE Light Switch - ON **PULSE or Landing Lt - ON**
- 33. Brakes - RELEASE

34. Takeoff Brief

TAKEOFF

NORMAL TAKEOFF

1. Wing Flaps - UP - 20° (10° preferred)
2. Throttle Control - FULL (push full in)
3. Propeller Control - 2400 RPM
4. Mixture Control - RICH (above 5000 feet pressure altitude, lean for maximum RPM)
5. Elevator Control - LIFT NOSEWHEEL (at 50 - 60 KIAS)
6. Climb Airspeed - 70 KIAS (FLAPS 20°)
80 KIAS (FLAPS UP)
7. Wing Flaps - RETRACT (at safe altitude)

SHORT FIELD TAKEOFF

1. Wing Flaps - 20°
2. Brakes - APPLY
3. Throttle Control - FULL (push full in)
4. Propeller Control - 2400 RPM
5. Mixture Control - RICH (above 5000 feet pressure altitude, lean for maximum RPM)
6. Brakes - RELEASE
7. Elevator Control - SLIGHTLY TAIL LOW
8. Climb Airspeed - 58 KIAS (until all obstacles are cleared)
9. Wing Flaps - RETRACT SLOWLY (when airspeed is more than 70 KIAS)

Takeoff / Climbout Sequence

Heading Bug - press to center aligned on r/w

Go Around - activate (if desired)

Power - Engine Instruments/Airspeed Alive

Rotate - at tape mark

70 KIAS - Flaps Up

90 KIAS - Power 23" / Fuel Top of Green

**Autopilot - stabilize ROC, Trim, Heading Bug centered
> 800'**

ENROUTE CLIMB

NORMAL CLIMB

1. Airspeed - 85 - 95 KIAS
2. Throttle Control - 23 in.hg. or FULL (if less than 23 in.hg.)
3. Propeller Control - 2400 RPM
4. Mixture Control - 15 GPH or FULL RICH (if less than 15 GPH)
5. FUEL SELECTOR Valve - BOTH
6. Cowl Flaps - OPEN (as required)

MAXIMUM PERFORMANCE CLIMB

1. Airspeed - 80 KIAS at sea level
74 KIAS at 10,000 feet
2. Throttle Control - FULL (push full in)
3. Propeller Control - 2400 RPM
4. Mixture Control - FULL RICH (or SET to Maximum Power Fuel Flow Placard value for altitude in Amplified Normal Procedures)
5. FUEL SELECTOR Valve - BOTH
6. Cowl Flaps - OPEN

CRUISE

1. Power - 15 - 23 in.hg. at 2000 - 2400 RPM (no more than 80% power recommended)
2. Elevator and Rudder Trim Controls - ADJUST
3. Mixture Control - LEAN (for desired performance or economy)
4. Cowl Flaps - CLOSED
5. FMS/GPS - REVIEW and BRIEF (OBS/SUSP softkey operation for holding pattern procedure (IFR))

DESCENT

1. Power - AS DESIRED
2. Mixture - ADJUST (if necessary to make engine run smoothly)
3. Cowl Flaps - CLOSED
4. Altimeters:
 - a. PFD (BARO) - SET
 - b. Standby Altimeter - SET
5. ALT SEL - SET
6. CDI Softkey - SELECT NAV SOURCE
7. FMS/GPS - REVIEW and BRIEF (OBS/SUSP softkey operation for holding pattern procedure (IFR))

CAUTION

THE G1000 HSI SHOWS A COURSE DEVIATION INDICATOR FOR THE SELECTED GPS, NAV 1 OR NAV 2 NAVIGATION SOURCE. THE G1000 HSI DOES NOT PROVIDE A WARNING FLAG WHEN A VALID NAVIGATION SIGNAL IS NOT BEING SUPPLIED TO THE INDICATOR. WHEN A VALID NAVIGATION SIGNAL IS NOT BEING SUPPLIED, THE COURSE DEVIATION BAR (D-BAR) PART OF THE INDICATOR IS NOT SHOWN ON THE HSI COMPASS CARD. THE MISSING D-BAR IS CONSIDERED TO BE THE WARNING FLAG.

WARNING

WHEN THE AUTOPILOT IS ENGAGED IN NAV, APR OR BC OPERATING MODES, IF THE HSI NAVIGATION SOURCE IS CHANGED MANUALLY, USING THE CDI SOFTKEY, THE CHANGE WILL INTERRUPT THE NAVIGATION SIGNAL TO THE AUTOPILOT AND WILL CAUSE THE AUTOPILOT TO REVERT TO ROL MODE OPERATION. NO AURAL ALERT WILL BE PROVIDED. IN ROL MODE, THE AUTOPILOT WILL ONLY KEEP THE WINGS LEVEL AND WILL NOT CORRECT THE AIRPLANE HEADING OR COURSE. SET THE HDG BUG TO THE CORRECT HEADING AND SELECT THE CORRECT NAVIGATION SOURCE ON THE HSI, USING THE CDI SOFTKEY, BEFORE ENGAGING THE AUTOPILOT IN ANY OTHER OPERATING MODE.

8. FUEL SELECTOR Valve - BOTH
9. Wing Flaps - AS DESIRED (UP - 10° below 140 KIAS)
(10° - 20° below 120 KIAS)
(20° - FULL below 100 KIAS)

10. Landing Weight - Calculate

BEFORE LANDING

1. Pilot and Passenger Seat Backs - MOST UPRIGHT POSITION
2. Seats and Seat Belts - SECURED and LOCKED
3. FUEL SELECTOR Valve - BOTH
4. Mixture Control - RICH
5. Propeller Control - HIGH RPM (push full in)
6. LAND and TAXI Light Switches - ON
7. Autopilot - OFF
8. CABIN PWR 12V Switch - OFF

LANDING

NORMAL LANDING

1. Airspeed - 70 - 80 KIAS (Flaps UP)
2. Wing Flaps - AS DESIRED (UP - 10° below 140 KIAS)
(10° - 20° below 120 KIAS)
(20° - FULL below 100 KIAS)
3. Airspeed - 60 - 70 KIAS (Flaps FULL)
4. Elevator and Rudder Trim Controls - ADJUST
5. Touchdown - MAIN WHEELS FIRST
6. Landing Roll - LOWER NOSEWHEEL GENTLY
7. Braking - MINIMUM REQUIRED

SHORT FIELD LANDING

1. Airspeed - 70 - 80 KIAS (Flaps UP)
2. Wing Flaps - FULL (below 100 KIAS)
3. Airspeed - 60 KIAS (until flare)
4. Elevator and Rudder Trim Controls - ADJUST
5. Power - REDUCE TO IDLE (as obstacle is cleared)
6. Touchdown - MAIN WHEELS FIRST
7. Brakes - APPLY HEAVILY
8. Wing Flaps - UP

(Continued Next Page)

LANDING (Continued)

BALKED LANDING

1. Throttle Control - FULL (push full in) and 2400 RPM
2. Wing Flaps - RETRACT to 20°
3. Climb Speed - 55 KIAS
4. Wing Flaps - RETRACT SLOWLY (after reaching a safe altitude and 70 KIAS)
5. Cowl Flaps - OPEN

AFTER LANDING

1. Wing Flaps - UP
2. Cowl Flaps - OPEN

3. Lean

SECURING AIRPLANE

1. Parking Brake - SET
2. Throttle Control - IDLE (pull full out)
3. Electrical Equipment - OFF
4. AVIONICS Switch (BUS 1 and BUS 2) - OFF
5. Mixture Control - IDLE CUTOFF (pull full out)
6. MAGNETOS Switch - OFF
7. MASTER Switch (ALT and BAT) - OFF **Hobbs/Tach**
8. STBY BATT Switch - OFF
9. Control Lock - INSTALL
10. FUEL SELECTOR Valve - LEFT or RIGHT (to prevent crossfeeding between tanks)

N997CP / CPF1497 Protocol

Scheduling thru a/c manager, LtCol John Shelton, 816.392.1444 (24/7 voice/text). Please advise when back in hangar after usage.

Hangar E14, NEC of IXD airport; hangar access thru Advanced Aviation, a/c key is stored in black a/c notebook on planning table under left wing.

Fuel dip stick behind pilot's seat. Each pilot dips tanks as part of preflight and enters fuel load into Engine>System>. An "annotated check list", adding the items normally found on a CAP checklist, is in the aircraft or at http://kcscouts.home.att.net/997_090724.pdf.

On initial call to ground, state location as "North T"

After flight, dip tanks and tell Advanced Aviation (913.768.1500) driver how many gallons to put on each side to bring back to 50 gal ramp load. Get the fuel invoice in AA office for inclusion with 108. Annotate receipt with mission code, mission number, PIC name, hobbs time, and if member paid. (Alternative is to use self service pump at Advanced Aviation. CAP receives self-serve price in any event.) Use of gas card in book is by Wing permission.

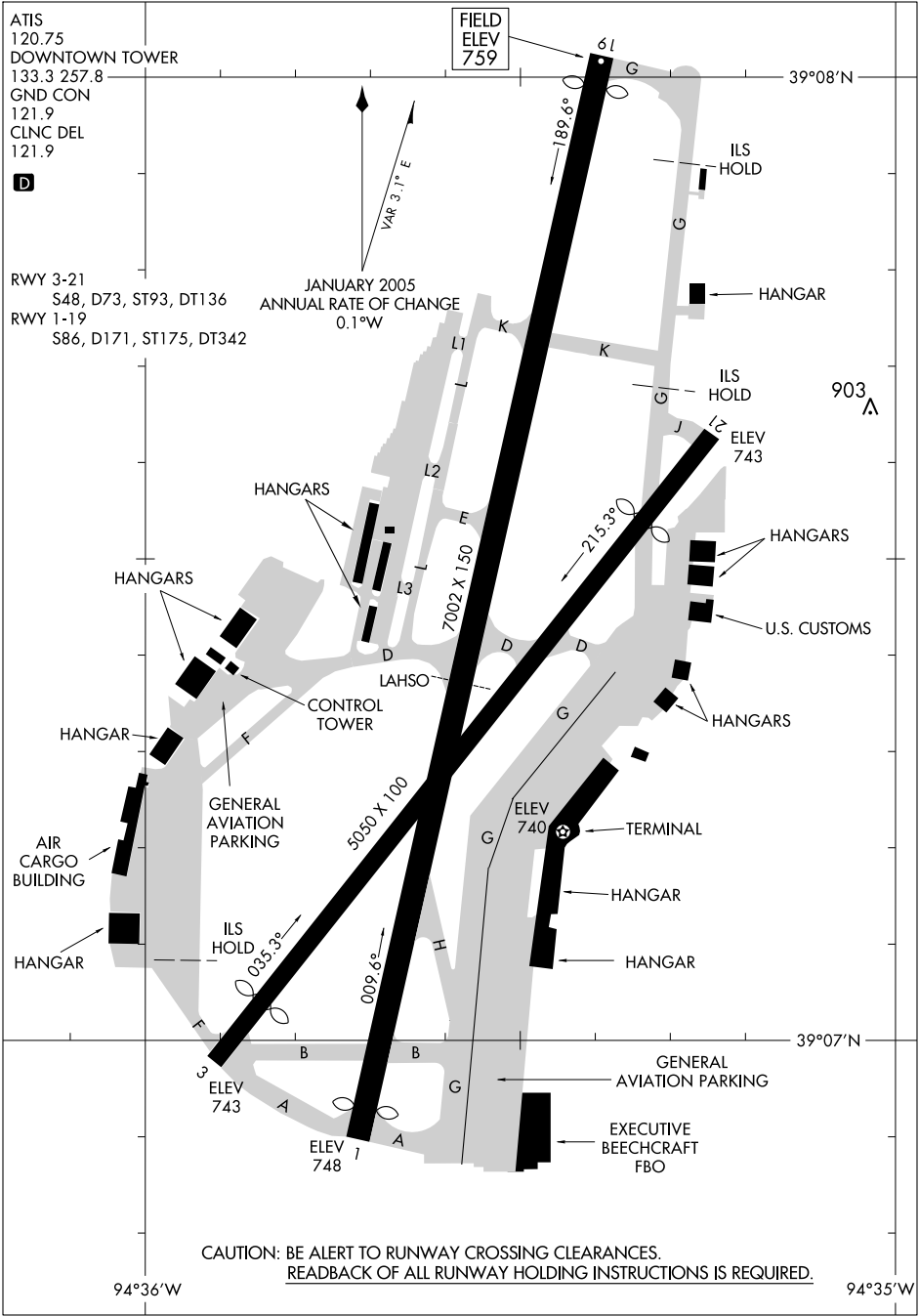
A/C is pushed back into hangar using vertical stabilizer sight line on back hangar wall for proper alignment. Check position of main mount stops against orange calibration spots before pushing in since clearance behind horizontal stabilizer is minimal.

Cleaning supplies for a/c are on table behind right wing. Use Zepp (only!) + paper towel (only!) for glass, soap sprayers and bug sponges for painted surfaces (wings, struts, cowl, horizontal stabilizer). (We always clean the bugs off the a/c.)

CAPF 108 is to be sent to KSWG (Attn: June), 3024 Arnold Av, Salina KS 67401. Enclose annotated fuel receipts. 108 is due five days after completion of event. (Note: KSWG does not bill for flights.) If flight is AF funded, leave a/c dry rate blank. If member funded, the rate is \$41/hr. Note on the 108 any portion paid by member.

Report squawks to ...

v1.1, 7/24/09



NC-3, 30 JUL 2009 to 27 AUG 2009

NC-3, 30 JUL 2009 to 27 AUG 2009

